

# The Association of Surgeons in Training

Laparotomy was required for 10 episodes (20%). 27 episodes (55%) required minor operation such as removal of F.B or closure of skin laceration. Of the two patients admitted with insertion of foreign body per rectum, one required laparotomy to retrieve a glass.

## INTRACORPOREAL ANASTOMOSIS IN RIGHT HEMICOLECTOMY – A SAFE PROCEDURE

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**Introduction:** Laparoscopic extracorporeal anastomosis (ECA) in right hemicolectomy has been routinely performed in our department since February 2003. Intracorporeal anastomosis (ICA) was introduced in April 2007 allowing specimen retrieval via a smaller left iliac fossa incision. We compare our experience of ICA with ECA.

**Method:** Prospective audit of 73 consecutive patients undergoing right hemicolectomy was performed. Data collected were patient demographics, BMI, duration of operation, type of anastomosis, previous surgery, conversion rate, histology, operative blood loss, length of stay and post operative complications. Statistical analysis was performed using mann-whitney test.

**Results:** 48 ECA and 25 ICA were performed. There was no significant difference in sex distribution (ECA; male 24, female 24 vs. ICA; male 9, female 16 ( $p = 0.254$ )) and median age at operation (ECA; 72.5 years vs. ICA; 70 years ( $p = 0.898$ )). ECA took longer than ICA; median 163.5 vs. 142 minutes respectively ( $p = 0.041$ ). Length of stay was significantly shorter in those undergoing ICA (ICA; 4 days vs. ECA; 6 days ( $p < 0.001$ )). There was one anastomotic leak in the ECA group.

**Discussion:** The ICA offers a comparable, safe alternative to ECA in laparoscopic right hemicolectomy. Reduced hospital stay is an added advantage possibly related to a smaller lower abdominal incision.

## LUMBAR CHEMICAL SYMPATHECTOMY IN PERIPHERAL VASCULAR DISEASE: DOES IT STILL HAVE A ROLE? – A NATIONAL SURVEY

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**Introduction:** Lumbar chemical sympathectomy (LCS) is used principally in inoperable peripheral vascular disease (PVD) to alleviate symptoms of rest pain. No guidelines currently exist for its use in PVD. The aim of this study was to evaluate the role of LCS with regards to indications and outcomes in the UK and Irish vascular practice.

**Methods:** Specifically designed questionnaires were sent to Vascular Surgical Society members. Questions related to their current use of LCS including indications, outcome parameters, use in diabetics and complications encountered.

**Results:** 490 questionnaires were sent out and 242 responses (49%) were received. Responses covered 84 vascular departments. 75% of respondents felt that LCS still had a role in current practice. 78% performed less than 10 procedures per year. Inoperable PVD with rest pain was the main indication in over 80% of responses, with 27% using it for treatment of ulcers. Only 21% used LCS in diabetics. Symptomatic clinical improvement was used to assess outcome following LCS in 96% of responses.

**Conclusion:** Our study shows that majority continue to use it, though evidence for its efficacy has been equivocal. Clear guidelines regarding patient selection and indication can redefine the role of LCS in peripheral vascular disease.

## PATTERNS OF RECURRENCE FOLLOWING GASTRO-OESOPHAGECTOMY – IS THERE A ROLE FOR ADJUVANT RADIOTHERAPY?

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**Aims:** Circumferential resection margin (CRM) involvement is an independent prognostic marker for recurrence following surgery, and it is speculated that adjuvant radiotherapy following R1 resection might be of benefit.

**Methods:** All patients undergoing oesophagectomy during a 6 year period at one centre were studied. Data regarding pathology and survival were collected and analysed. Survival was calculated with Kaplan-Meier Survival Curves and Log Rank analysis.

**Results:** 127 Patients had a minimum of 12 months follow up (median 41). There were 80 (63%) R0 resections and 47 (37%) R1 resections. 9 patients were excluded from analysis (8 hospital deaths and 1 incomplete data). R0 median survival was 6.11 years, R1 19 months ( $p < 0.0001$ ). 32 (71%) of the R1 patients recurred during the study period, locoregional in 5 (16%) and systemic in 27 (84%). 15 (21%) of the R0 resections recurred, 5 (33%) locoregional and 10 (67%) systemic. Median survival for all those who recurred was 19 months.

**Conclusion:** 84% of the R1 recurrences were systemic. This propensity for distant haematogenous recurrence suggests that adjuvant radiotherapy to the tumour bed would add little to survival, even in those with an involved resection margin.

## THE EFFECT OF BODY MASS INDEX (BMI) ON OUTCOMES FOLLOWING OESOPHAGECTOMY

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**Introduction:** Morbid obesity is a significant risk factor for oesophageal cancer and may contribute to poorer outcomes following oesophagectomy due to surgical and post-operative difficulties. We investigated the effect of BMI on outcomes following oesophagectomy.

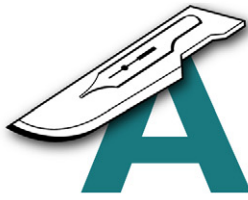
**Methods:** A prospective database of all oesophagectomies performed at a collaborative upper GI/thoracic cancer centre from 2002 was analysed. Endpoints were 5-year survival, length of stay and in-hospital mortality. Statistical analysis was performed using the Kaplan-Meier, Chi squared and Mann-Whitney U (MWU) tests.

**Results:** 326 cases were identified. There was no difference in in-hospital mortality for the morbidly obese (7% v 7%  $p = 0.97$  Chi Squared) or length of stay (median 13 days v 13 days,  $p = 0.87$  MWU) in the morbidly obese. Similar findings were found with the obese (BMI > 30) and overweight (BMI > 25). However, in-hospital mortality and length of stay were significantly higher for those with a BMI < 20. Morbid obesity was not associated with poorer survival following oesophagectomy ( $p = 0.963$ ), however patients with BMI < 20 did have poorer survival ( $p = 0.016$ ). Interestingly there was a trend towards longer survival in patients with BMI > 25 but this did not reach significance ( $p = 0.07$ ).

**Conclusions:** Patients with morbid obesity who undergo oesophagectomy can expect similar results to their lighter counterparts.

## SHOULD INFRAINGUINAL BYPASS SURGERY BE PERFORMED BY UNSUPERVISED TRAINEES?

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**Aim:** Trainees need to acquire technical competencies to perform major procedures prior to taking up consultant posts. This study analyses the outcomes of infrainguinal bypass surgery performed by a consultant surgeon or supervised trainee, compared with those performed by unsupervised senior vascular trainees.

**Methods:** Data were collected on all patients who underwent infrainguinal bypass grafting at our institution between 2000 and 2009. 30-day mortality, limb salvage, graft patency rates, and overall survival were assessed.

**Results:** 500 infrainguinal bypass procedures were performed. 377 cases were performed by the consultant, or a supervised trainee (17% above knee, 37% below knee, 46% distal), and 72 were performed by unsupervised vascular trainees (17% above knee, 47% below knee, 37% distal). Vein graft was used in 76% and 80% cases respectively. 30 day mortality was significantly higher after operation by a consultant, 6.6%, compared to a trainee 0% ( $p < 0.0001$   $\chi^2$ ). Limb salvage (17%) and graft patency rates (66%) were comparable, as was overall survival (consultant vs trainee; at 2 year 75% vs 72%  $p = 0.997$  Log rank).

**Conclusion:** Satisfactory patient outcomes after infrainguinal bypass surgery can be achieved by unsupervised experienced vascular trainees. The higher 30-day mortality in the consultant operated group probably reflects appropriate case selection, with training allocated to fitter patients.

## REALLOCATION OF FOUNDATION PROGRAMME DOCTORS FROM TEAMS TO WARDS REDUCES MORTALITY FROM PROXIMAL FEMORAL FRACTURE

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**Introduction:** Proximal femoral fractures are common and carry a 30 day mortality of 10–20%. Alternative models of care have been described, however, no studies have assessed the re-allocation of junior doctors, who often care for patients on numerous wards.

**Methods:** This was a retrospective study of 559 consecutive patients admitted to a UK university teaching hospital with proximal femoral fracture. Foundation years 1 and 2 were re-allocated from consultant teams to wards; surgical trainees remained with teams. No alterations were made in numbers of doctors, shift patterns, hours, or any other factor associated with outcome.

**Results:** Mortality reduced from 13.9% to 7.2% ( $p = 0.009$ ) and occurred later (17.0 days versus 13.4;  $p = 0.022$ ) after intervention. There were no significant differences in 20 patient, fracture or operative factors associated with adverse outcome. There were no differences in cause of death, delay to operation, length of stay and post-operative complications, except wound haematomas which increased from 0.0% to 2.0% ( $p = 0.035$ ).

**Conclusion:** Reallocation of Foundation doctors from teams to wards reduces and delays mortality in proximal femoral fracture, a model potentially applicable to other specialties. The mechanisms are unclear, but may include improved efficiency and contact time allowing more proactive and reactive care.

## CAN PREOPERATIVE RADIOGRAPHIC MARKERS BE USED TO PREDICT LOOSENING OF TOTAL HIP ARTHROPLASTIES?

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91 patients with a cemented Charnley Elite plus total hip arthroplasty were reviewed to assess whether preoperative radiological markers could predict aseptic loosening. We compared 36 patients with post operative radiological signs of aseptic loosening and 55 patients with a well fixed stable femoral component. Preoperative x rays were assessed blindly in a standardised fashion for; 1) Cortex ratio - medial femoral cortex 50 mm below the lesser trochanter divided by thickness of the shaft. 2) Canal ratio - Thickness of intramedullary canal at the level of the greater trochanter divided by that at the isthmus. 3) The Bombelli biological classification of OA which assesses the degree of osteophyte formation (atrophic, normotrophic and hypertrophic). Patients with loosening had narrower femoral cortices ( $p = 0.05$ ) and were more likely to have presented with atrophic osteoarthritis ( $p = 0.05$ ). The canal ratio however was not significantly related.

## LOCALISATION AND IDENTIFICATION OF BACTERIA IN THE SKIN OF PATIENTS UNDERGOING PRIMARY KNEE AND HIP REPLACEMENT SURGERY AFTER SURGICAL SKIN PREPARATION

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**Background:** Arthroplasty infection rates are up to 2.5%. Surgical skin preparation reduces surgical site infections. However skin preparation removes only bacteria from the surface of the skin, leaving deeper layers colonised.

**Methods:** After informed consent, 22 patients participated (13 knees, 9 hips). A swab and skin biopsy was taken after skin preparation with alcoholic povidone-iodine. The biopsy was cut aseptically in half. One half was disrupted using forceps. This half and the swab were cultured separately anaerobically at 37°C. Half of the biopsy was frozen in isopentane, cryosectioned and Gram stained.

**Results:** 7 of 20 swabs (2 *S.epidermidis*, 3 *P.acnes*, 1 *S.aureus* and 1 with both *S.epidermidis* and *P.acnes*) and 10 of 22 biopsies grew bacteria (4 *P.acnes*, 3 *S.epidermidis*, 2 *S.aureus* and 1 *S.capitis*). Gram positive bacteria were seen for all biopsy sections.

**Discussion:** Selwyn and Ellis (1972) using iodine found over 99% of bacteria are removed from epidermis. In this study 35% remained on the surface when using povidone-iodine and 46% in deeper layers. 1. HPA, 2009. [http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1259151994683](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1259151994683) - accessed 06/01/2010. 2. NICE, 2008. <http://www.nice.org.uk/nicemedia/pdf/CG74FullGuideline.pdf> accessed 06/01/2010. 3. Lowbury E J. 1961. Journal of clinical pathology 14:85-90. 4. Selwyn S, Ellis H. 1972. Br Med J 1:136-140.

## SAFETY OF AUTOLOGOUS BLOOD TRANSFUSION FOLLOWING INTRAOPERATIVE INTRAARTICULAR ROPIVACAINE ANAESTHESIA

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**Introduction:** Intraoperative local anaesthetic injection enables early mobilisation after total knee arthroplasty (TKA). Autologous blood transfusion reduces requirements, and complications, of allogenic blood transfusions. Currently these two techniques are not used together, due to concern of intravenous administration of toxic doses of local anaesthetic from the reinfusion drain. This pilot study investigates the safety of using these two techniques together.